

503-226-1311
www.djcOregon.com

Two Dollars
Vol. 250, No. 9

Expansion plans

SERA Architects is preparing to open an office south of San Francisco to better serve clients in the Bay Area. **Page 2**

DJC

Information to aid design

A request for proposals has been issued for a consultant to dig into cultural history of the Willamette Falls riverwalk site. **Page 3**



Courtesy of U.S. State Department

An \$80 million renovation and expansion of the U.S. embassy in Helsinki received contributions from the Portland office of KPFF Consulting Engineers.

Tackling unique challenges abroad

KPFF, YGH and ZGF are among Portland firms working on U.S. embassy projects

BY INKA BAJANDAS
inka.bajandas@djcoregon.com

KPFF Consulting Engineers' work on a renovation and expansion of the U.S. embassy compound in Helsinki began with a crash course at the project site.

The engineers' weeklong trip to Finland was jam packed with research on what it takes to gain local approval for the project.

"You have to figure out what all the planning rules and regulations are, what all the permitting regulations are, in a week," said

Matthew Dolan, KPFF managing principal. "It's a pretty big effort."

The U.S. Department of State, for security reasons, contracts only with American firms for design and construction of such projects. But because they are built all over the world, KPFF engineers must consult with local building officials and closely coordinate with the contractor and on-site State Department staffers. Most of KPFF's work is done remotely, making that initial trip to the project site critical for information gathering, said Adam Roth, senior

project manager for the approximately \$80 million Helsinki embassy project, which finished last month.

"We meet with multiple government agencies," he said. "And then you walk the site and take as many pictures as possible."

This process has become a specialty for KPFF. In the past 15 years, the firm's Portland office has worked on 75 embassy projects, ranging from preliminary master planning through construction. Other Portland firms also have substantial embassy portfolios; Portland-based Yost

Grube Hall Architecture and ZGF Architects are two that have collaborated with KPFF.

Along with the challenges of designing a building in another country, Portland engineers and architects working on embassies must follow federal guidelines set by Bureau of Overseas Buildings Operations. This includes considerations for anti-ram protection against vehicles driving into the building and anti-climb measures to

See ABROAD, Page 4

Abroad: Challenge lies in creating appealing building

Continued from Page 1

prevent people from scaling walls.

"There are a huge amount of materials on what you can and cannot (use)," Dolan said.

The tricky part, YGH President Nels Hall said, is finding a way to make a heavily fortified building also appear inviting because it serves as the face of America in foreign countries and houses diplomatic programs.

"Security is giant," he said. "That is why Congress is funding these things. How do you find ways of meeting those requirements and still find ways to make these campuses seem open and inviting? We don't want to have the image that we're building these forts."

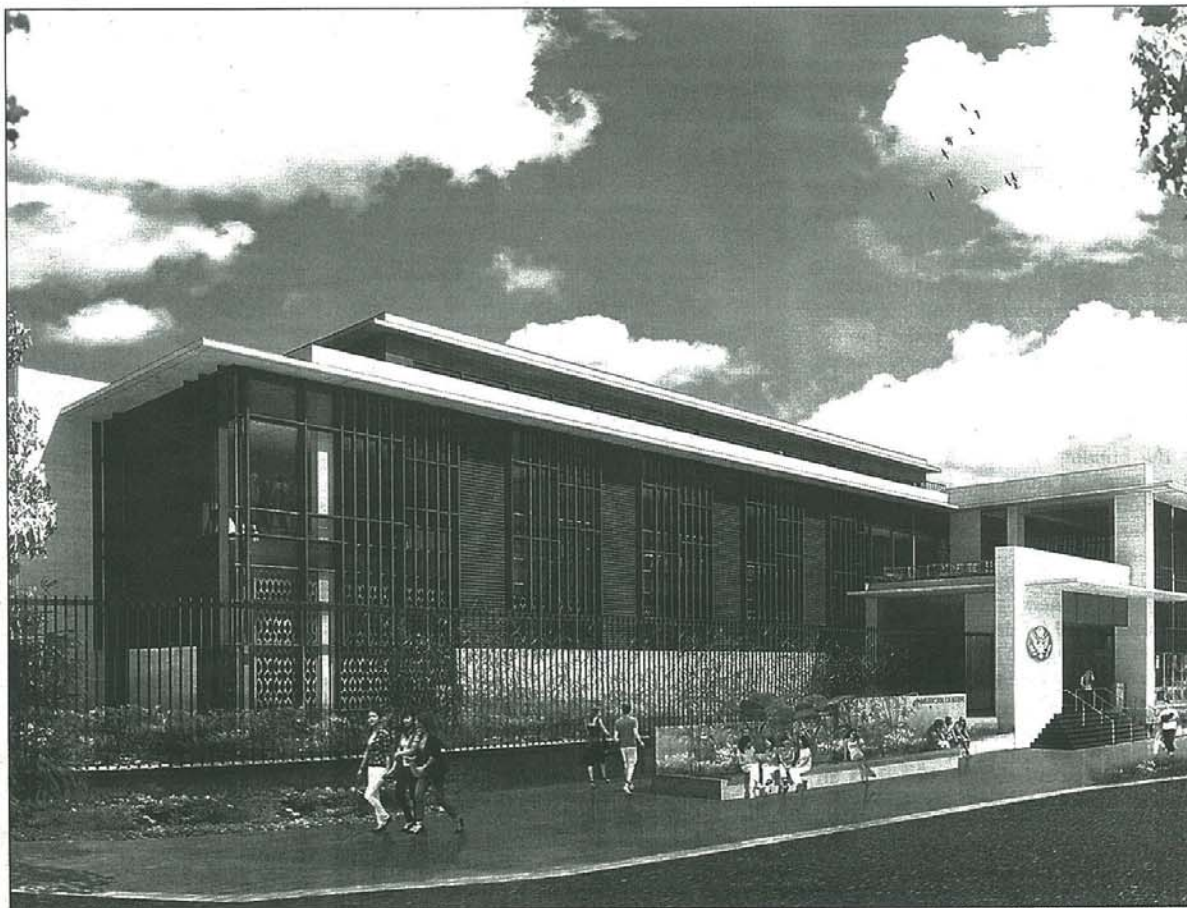
"You can build transparent fences that meet the anti-climb criteria and try and incorporate motifs that make a place unique," he added.

On the engineering side, challenges include working with unusual site shapes and anticipating the effect of extreme weather conditions on the embassy buildings. Roth, who has worked on 10 embassy projects for KPFF, said he often substitutes information on weather conditions in certain parts of the U.S. while doing storm modeling for projects in countries with insufficient records. For cold climates, he has referred to weather patterns in Alaska and Minnesota, and he has found that Fiji is comparable to Hilo, Hawaii, for rainfall.

The Helsinki project involved investigating historic storm surges because the embassy compound sits on a coastal site overlooking the Gulf of Finland.

"That was part of our research," Roth said. "We had to research the local climate ... You have to think about that information when you go somewhere that might not have very organized public agencies."

YGH's work on embassies began with an overall push by one of the firm's founders, Joachim Grube, to pursue



Courtesy of Yost Grube Hall Architecture

The American Center, which offers cultural and educational programs at the U.S. embassy in Yangon, Myanmar, is among numerous U.S. State Department facilities designed by Portland-based Yost Grube Hall Architecture.

more projects in developing countries, Hall said. Over the past 15 years, the firm has worked in 46 countries. This includes embassies in Islamabad, Pakistan and Quito, Ecuador and Yangon, Myanmar.

In the past, the firm has partnered with ZGF on embassy projects, but more recently worked together with Allied Works Architecture on a new embassy in Mo-

zambique.

KPFF's expertise in seismic retrofits helped it land a project with ZGF in the late 1990s for work on the U.S. consulate in Istanbul, Dolan said. This led to other State Department contracts for embassy projects in partnership with ZGF, YGH and Washington, D.C.-area architecture firms, he said. The firm worked togeth-

er Washington, D.C.-based architecture and engineering firm Page Southerland Page on the Helsinki embassy project. Since work on that embassy wrapped up, KPFF staffers are gearing up for the firm's next overseas project - a U.S. consulate compound in Nuevo Laredo, Mexico.

"We're just very fortunate to be able to keep working on them," Dolan said.